

REMARKS

Rejections over Liebenow (US Pat. 6,522,640) and Brandt (US Pat. 4,727,535)

Claims 1-15 stand rejected over Liebenow alone or in combination with Brandt.

Liebenow generally discloses a communication system (FIG. 2) in which a digital signal is encoded and modulated for transmission over a radio channel. At a unit (78) coupled to a telephone line, voiceband signal is processed in a CODEC (40) to produce a digital data signal. This digital data signal is transmitted to a second unit (21, 32) over a wireless channel using suitable error correction and modulation and demodulation. This digital signal is reproduced at the second unit. It is noteworthy that the original voiceband signal received at the first unit and processed in the CODEC is not itself transmitted to the second unit, and therefore, there is nothing to suggest that echo cancellation of the voiceband signal encoding the digital data signal would be performed at the second unit.

The secondary reference, Brandt, generally discloses a telephone interface that passes signals from the telephone network through a receiver circuit that outputs a substantially constant amplitude.

With reference to previously pending claims 3-5, the office action acknowledges that Liebenow does not disclose an AGC and relies on the receiver circuit in Brandt to provide the elements not disclosed by Liebenow.

As amended claim 1 requires that the base unit modulates a voiceband data signal received over the telephone line and transmits the modulated signal over the wireless medium. This is in contrast with Liebenow in which the voiceband signal is decoded in the CODEC to produce the data signal, and the data signal rather than the voiceband signal is sent over the wireless medium. Therefore Liebenow is lacking more than the office action has identified. In particular Brandt does not disclose or suggest any modification of Liebenow to yield the recited modulation and transmission of the voiceband signal that encodes the data stream. If Liebenow does disclose or suggest passing a voiceband signal over the wireless medium, it is not in the context of such a voiceband signal encoding a data signal.

Liebenow does not meet each of a number of additional requirements of claim 1 including:

- circuitry in the base unit coupled to the transmitter that controls a level of the voiceband signal to be substantially in a linear range of the transmitter
- an echo canceller in the remote unit for reducing echoes on the demodulated voiceband signal
- an interface in the remote unit to a modem circuit for decoding a data stream encoded in the voiceband signal.

Neither Brandt, nor any of the other cited references, provides what is missing from Liebenow. Therefore claim 1 is allowable for each of these additional reasons.

Amended claim 11 corresponds generally to cancelled claim 14. With reference to previously pending claim 14, the office action asserts that Liebenow inherently includes a switch for automatically selecting the mode for transmitting/receiving the data signals. The applicant does not agree that the recited "circuitry for triggering the switch in response to detecting the type of medium coupling the base unit and the remote unit" is inherent in Liebenow – such circuitry would not be required to control a switch, which could, for example, be manually positioned.

Newly added claims 16 and 17 are also allowable over the cited references for at least one or more of the reasons set forth above for claim 1.

The remaining claims are all properly dependent on one or more of the independent claims, and thus allowable therewith. Each of the dependent claims adds one or more further limitations that enhance patentability, but those limitations are not presently relied upon. For that reason, and not because applicants agree with the examiner, no rebuttal is offered to the examiner's reasons for rejecting the dependent claims.

Applicant : Ernie Lin et al.
Serial No. : 10/723,442
Filed : November 26, 2003
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Attorney's Docket No.: 12203-007001


Double patenting

The applicant will address the provisional obviousness-type double patenting rejection after prosecution of the parent application is closed.

Enclosed is a \$200 check for excess claim fees and a \$510 check for the Petition for Extension of Time fee. Please apply any other charges or credits to deposit account 06-1050.

Respectfully submitted,

Date: Sept. 22, 2005



J. Robin Rohlicek, J.D., Ph.D.
Reg. No. 43,349

Fish & Richardson P.C.
225 Franklin Street
Boston, MA 02110
Telephone: (617) 542-5070
Facsimile: (617) 542-8906